Submitted via E-mail:

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December 2, 2014

Ms. Tessa Fojut Central Valley Regional Water Quality Control Board 11020 Sun Center Drive, Ste. 200 Rancho Cordova, CA 95670

RE: Comments on the October 2014 Pyrethroid Basin Plan Amendment Preliminary Draft

Dear Ms. Fojut:

The California Farm Bureau Federation ("Farm Bureau") is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 57,000 agricultural, associate, and collegiate members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

Farm Bureau appreciates the opportunity to review and comment on the October 2014 Pyrethroid Basin Plan Amendment Preliminary Draft document ("BPA Preliminary Draft"), and offers the following initial comments, including technical issues, concerns with the proposed implementation language, and questions for peer review.

I. Overarching Comments

The goal of the Pyrethroid Basin Plan Amendment ("BPA") is "to establish water quality objectives and a program of implementation for the control of pyrethroid pesticides that are impacting or could potentially impact aquatic life uses in surface waters in the Sacramento and San Joaquin River watersheds of the Central Valley." (Central Valley Regional Water Quality Control Board, Central Valley Pyrethroid Pesticides TMDL and Basin Plan Amendment, available at "(last viewed Dec. 1, 2014).) Further, the BPA "will also be designed to establish Total Maximum Daily Loads for waterbodies that are listed for pyrethroids on the Clean Water Act

Section 303(d) list, and establish provisions to address and/or prevent future pyrethroid listings." (*Ibid.*)

When establishing water quality objectives, the Regional Board must adhere to the statutory limitation of "reasonableness." (Wat. Code, § 13000.) In enacting the Porter-Cologne Water Quality Control Act, the Legislature laid out specific goals and objectives for the State's waters. Regional Boards must conform to all such statutory mandates, including the Legislature's reasonableness objective:

The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to *attain the highest water quality which is reasonable*, considering *all demands being made and to be made on those waters* and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

(Wat. Code, § 13000, emphasis added.) In a recent decision, the California Supreme Court discussed the Legislature's intent, confirming its goal "to attain the highest quality which is reasonable." (City of Burbank v. State Water Resources Control Bd. (2005) 35 Cal.4th 613, 619, emphasis added.)

The use of the term "reasonable" and the "reasonableness" standard is not limited to the express goals laid out in Water Code section 13000. Rather, the Porter-Cologne Act expressly calls for reasonable actions throughout. (See Wat. Code, § 13241, [calling for water quality objectives that will provide "the reasonable protection of beneficial uses" upon mandated review of specific factors], emphasis added; Wat. Code, § 13050(h), [defines "water quality objectives" as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area."]; Wat. Code, § 13050(l)(1)), [defining pollution as "any alteration of the quality of water which may unreasonably affect" the waters of the state], emphasis added.)

These multiple references to reasonableness indicate the Legislature's desire for moderation and balance when regulating water quality. Thus, when analyzing impacts to water quality, proposing beneficial uses for protection, and establishing water quality objectives, the Regional Board must comply with and conform to the Legislative intent of the Porter-Cologne Act by applying the "reasonableness standard," that is, evaluate if the activity or control limit will *reasonably* protect the beneficial uses.

II. Concerns with Proposed Revisions to the Basin Plan's Implementation Chapter

Farm Bureau is concerned with the BPA Preliminary Draft's suggested revisions to the Basin Plan's Chapter IV, Implementation for Pesticide Discharges from Nonpoint Sources. (See Central Valley Regional Water Quality Control Board, Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins (22 April 2010), IV-33.31 et seq.) The proposed changes only address small portions of this outdated

section and do not revise the obsolete nature of the entire section. Since this section does not reflect the current regulatory practices or permitting approaches for nonpoint sources, and the proposed revisions do not remedy the flaws, Farm Bureau suggests that staff revise the section in its entirety, delete the entire section, or make no changes.

III. Peer Review Questions

Farm Bureau had the opportunity to review the peer review questions posed by the Pyrethroid Working Group and the California Association of Sanitation Agencies, and supports the concepts and questions recommended by both groups.

IV. Technical Comments

A. Protection of Beneficial Uses Should Include Data from Toxicity Tests Performed on Taxa Collected in the Field

Currently, the most sensitive species used to develop a majority of the pyrethroid criteria is *Hyalella azteca*. The tests used to develop the criteria for various pyrethroids involve laboratory populations of *Hyalella*. Similar studies have been performed using *Hyalella* collected from the field. Using organisms collected from the field for toxicity tests is a more direct assessment of the protection of WARM and COLD beneficial uses. U.S. EPA supports the use of field organisms as it has used data from organisms obtained from the field in the development of criteria and its guidance documents do not specifically allow the rejection of toxicity test data using field collected organisms. Thus, toxicity data results from these field tests should also be included in the development of the pyrethroid criteria.

B. The Proposed Additivity Equation Should Not be Used

The proposed additivity equation is inappropriate for use in this context because the denominator of each term is a criterion value (the proposed objective), not a direct measure of toxicity. Using the criteria values as denominators introduces a safety factor into each term in the equation that when combined with other safety factors from other terms generates overly conservative values. The appropriate method for generating an additivity equation is for the denominator of each term to be a direct measure of toxicity such as an LC50.

C. Bioavailability

For a large number of constituents including pyrethroids, the toxic fraction in surface waters is the portion of the chemical that is dissolved in water because it is the fraction that is bioavailable to organisms. This bioavailable fraction is recognized as the relevant fraction for evaluating toxicity in the UCD criteria documents. Consequently, in assessing compliance with any proposed objective, the measurement of pyrethroids in water should focus on the bioavailable fraction in the water column. Methods are available that allow the calculation of a bioavailable fraction from the total amount of pyrethroid in water, or the bioavailable fraction can be measured directly. These options should be available to dischargers to determine compliance with any water quality objectives developed for pyrethroids.

V. Conclusion

Farm Bureau appreciates the opportunity to provide comments on the October 2014 Pyrethroid Basin Plan Amendment Preliminary Draft document and looks forward to working with the Regional Board in the future on the development of the basin plan amendment.

Respectfully,

KÁRI E. FISHER

Associate Counsel